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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,093	09/30/2003	Robert P. Rossi	5760-12900	4769
35690	7590	11/02/2005	EXAMINER	
MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C. P.O. BOX 398 AUSTIN, TX 78767-0398			SCHNEIDER, JOSHUA D	
			ART UNIT	PAPER NUMBER
			2182	
DATE MAILED: 11/02/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/675,093	Applicant(s) ROSSI, ROBERT P.	
	Examiner Joshua D. Schneider	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7, 11-18 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11-18 and 22-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/13/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 6, 7, 11, 13, 16, 18, 22, and 24, are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,898,667 to Umberger et al.

3. With regards to claims 1, 11, and 22, Umberger teaches monitoring utilization of a system resource (column 7, lines 41-43); a data management process selectively performing I/O operations dependent upon the monitored utilization of the system resource (column 7, lines 44-51).

4. With regards to claims 3, 13, and 24, Umberger teaches selectively performing the I/O operations includes allowing said I/O operations to be performed in response to the monitored utilization of the system resource falling below a predetermined threshold (column 8, lines 5-9); and preventing said I/O operations from being performed in response to the monitored utilization of the system resource exceeding the predetermined threshold (column 7, lines 44-51).

5. With regards to claims 6 and 16, Umberger teaches said system resource is an input/output (I/O) subsystem (column 8, lines 5-9).

6. With regards to claims 7 and 18, Umberger inherently teaches selectively time slicing said I/O operations dependent upon the monitored utilization of the system resource, as

performing and preventing the I/O operations over time in accordance with a monitored threshold of operations time slices the operations.

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 12, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,898,667 to Umberger et al. in further view of U.S. Patent 6,615,244 to Singhal.

9. With regards to claims 2, 12, and 23, Umberger teaches said data management process is executed as a portion of a data migration application, not a data backup application. Singhal teaches that it was well known in the art at the time of invention to use monitored idle time for backup operations (column 1, lines 6-55). It would have been obvious to use the resource monitoring of Umberger to complete data backup application in order to eliminate the need for a user to schedule backup operations.

10. Claims 4, 14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,898,667 to Umberger et al. in further view of U.S. Patent Application Publication 2004/0143569 to Gross et al.

11. With regards to claims 4 and 14, Umberger teaches said I/O operations are performed in response to time and event information, used to trigger the operations (column 6, line 54, through column 7, line 3), but fails to explicitly teach that time/event information is the monitored utilization of the system resource falling below a predetermined threshold for at least a

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predetermined amount of time. Gross teaches using idle time to perform background operations. Gross teaches that idle time can be defined by in many different ways, including low processor utilization, low bus utilization, or a period of device inactivity (paragraph 79). It would have been obvious to one of ordinary skill in the art at the time of invention to use the monitored predetermined time of below a threshold of activity of Gross for the triggering of I/O operations in Umberger in to allow the user definition of trigger events in order to create a more user customizable application.

12. With regards to claim 17, Umberger fails to teach said system resource is one or more central processing units (CPUs). Gross teaches using idle time to perform background operations. Gross teaches that idle time can be defined by in many different ways, including low processor utilization, low bus utilization, or a period of device inactivity (paragraph 79). It would have been obvious to one of ordinary skill in the art at the time of invention to use the monitored predetermined time of below a threshold of activity of Gross for the triggering of I/O operations in Umberger in to allow the user definition of trigger events in order to create a more user customizable application.

13. Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,898,667 to Umberger et al. in further view of U.S. Patent 5,953,729 to Cabrera et al.

14. With regards to claims 5 and 15, Umberger teaches said I/O operations are performed in response to time and event information, used to trigger the operations (column 6, line 54, through column 7, line 3), but fails to explicitly teach selectively performing the I/O operations includes allowing said I/O operations to be performed in response to said I/O operations not having been performed for longer than a predetermined timeout period. Cabrera teaches that it was well

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known at the time of invention to monitor the time since the last backup operation, and perform the operation after such period of time has elapsed (column 3, lines 47-50). It would have been obvious to one of ordinary skill in the art at the time of invention to use the monitored predetermined period of time since last backup operation of Cabrera for the triggering of I/O operations in Umberger in to allow the user definition of trigger events in order to ensure low amounts of lost time in a data recovery application.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D. Schneider whose telephone number is (571) 272-4158. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDS



**KIM HUYNH  
PRIMARY EXAMINER**

10/31/05